

Management Plan Review Update: 1998-2002



A herring gull flies over a vessel in its search for food.

Photographer:
Bob Michelson



Stellwagen Bank



Issues and Concerns

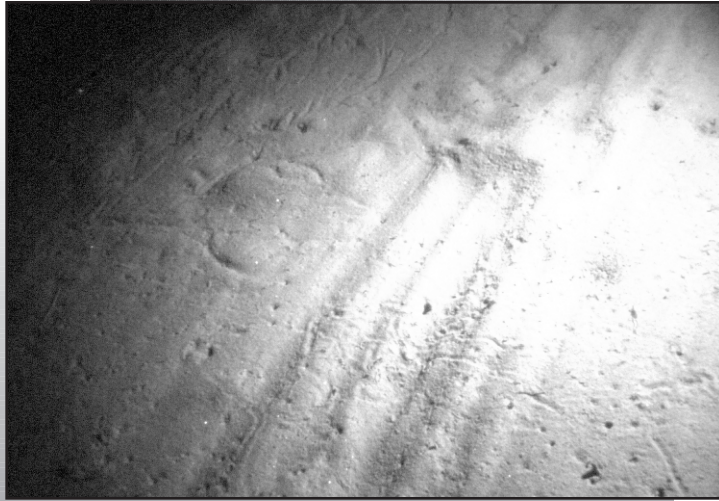
The existing management plan for the *Gerry E. Studds* Stellwagen Bank National Marine Sanctuary was published in July 1993. In December 1998 and January 1999, the Sanctuary initiated formal review of its management plan by holding “scoping” meetings to ask the public for comments on the status of site management. Scoping comments generally include a broad range of information on scope, types and significance of issues related to the Sanctuary’s management.

The public identified several high-profile topics as important matters for Sanctuary management during the scoping meetings and associated comment period of 1998/99. The issues and concerns that follow relate to these topics. They are representative of the comments received at that time and lend perspective to continued scoping, which is scheduled for Summer/Fall 2002.

Each concern is followed by possible actions suggested through Sanctuary staff analysis. The actions are indicative of the kinds of management strategies the site could develop to address the issues and concerns presented. Consider them only as examples for the eventual development of actual management strategies.

The Sanctuary is not seeking comment for or against this information at this time; that will await preparation of the draft management plan when various alternative approaches will be presented. Instead, we are seeking additional comments people have on any aspect of the management of Stellwagen Bank National Marine Sanctuary that the Sanctuary should consider in revising its management plan.

Read the accompanying document “State of the Sanctuary Report” for background and see the note at the end of this insert to learn how to get involved.



Scientists have been studying the impacts of fishing gear on the Sanctuary seafloor.

*Photographer:
Peter Auster and
Paul Donaldson,
NURC-UConn*

ISSUE 1: Alteration of Seafloor Habitat and Ecosystem Protection

The alteration of seafloor habitat in the Sanctuary was an issue of particular concern. Comments focused specifically on the growing evidence that fishing effort with certain gear types (mostly bottom trawls and dredges) is having significant and measurable impacts on benthic communities in the Sanctuary. Some argued that these activities might be dramatically changing community compositions and affecting ecosystem processes.

Repeated interest was expressed in the use of marine zoning within the Sanctuary as a means to realize specific management goals. A zoning plan would delineate areas within the Sanctuary that limit or exclude particular activities (such as fishing with mobile gear). Part of a zoning plan might involve no-take marine reserves, areas that exclude fishing activity entirely, for a subset of each major seafloor habitat type. Opportunity exists to work cooperatively with the National Marine Fisheries Service and the New England Fishery Management Council in addressing this issue.

Other areas of concern focused on human impacts to living marine resources from such activities as ghost fishing (lost gear that continues to fish), fiber optic cable installation, ocean dumping, marine debris, off-shore mariculture and coastal run-off. Many argued for increased efforts to better understand Sanctuary biodiversity and impacts of human activity on the site ecosystem, placing greater emphasis on conservation. The need for monitoring ecosystem condition was expressed, as was boundary expansion to include more diverse habitat types.

Concern A: Alteration of Sanctuary Habitat by Human Activity

Possible Actions

- Calculate Recovery Rates of Seafloor Habitat and Associated Species
- Implement Marine Zoning Approach to Management

Concern B: Need for More Detailed Site Characterization

Possible Actions

- Design and Implement a Spatially-Referenced Inventory of Habitat Types in the Sanctuary
- Establish a Habitat Research Reference Area Within the Sanctuary Section of the Western Gulf of Maine Closure Area
- Undertake an Integrated Analysis of Food Web Relationships in the Sanctuary
- Strengthen Cooperative Efforts with Other Regional Resource Management Agencies

ISSUE 2: Impacts of Human Activities on Marine Mammals

The need for increased protection of various marine mammals in the Sanctuary was a large concern voiced by scoping participants. To provide better protection, commenters argued, the site needs more information about such things as how marine mammals use the Sanctuary and how their sex, age, maternal lineage, calving history and distribution affect their populations. Habitat requirements, prey bases, interrelationships with other species, and impacts of humans on their behavior were noted as important to know. Within the larger issue of human impacts, three concerns stood out in particular.

The first concern focused on the role of vessels in the harassment, injury and mortality of Sanctuary marine mammals, particularly the “seen” whale around which vessels congregate. Commenters disagreed about whether densities and proximity of whale watching vessels interfere with feeding activity of whales. It was deemed appropriate that the Sanctuary direct greater effort toward establishing programs to encourage responsible whale watching within its boundaries.

The second concern related to the “unseen” whale. This is a whale that surfaces unexpectedly in the path of a moving vessel or is subsurface, but at a depth at which it could be struck. It was pointed out that an increased number of ship strikes are occurring in areas where whales congregate near shipping lanes or where vessel speed among whale watch vessels and recreational boats could be a factor.

The third concern focused on marine mammal entanglements and the associated risk of mortality. Entanglements often involve fishing gear, derelict or otherwise. Of note, the appearance of an entangled animal in the Sanctuary does not necessarily mean that the animal became entangled in the Sanctuary. Marine mammals are wide ranging and may encounter gear elsewhere and drag it long distances.

General concerns raised by commenters included the impact of vessel noise and other human generated acoustics on marine mammals, a lack of coordination among various regional marine mammal protection agencies, inadequate guidelines for approach distances to whales in the Sanctuary, impacts from off-shore mariculture on marine mammals (e.g., risk of entanglement), and the potential northward extension of the Sanctuary boundary to include additional marine mammal feeding areas on Jeffreys Ledge.



Humpback whales are known to make close approaches to whale-watch vessels.

*Photographer:
Regina Asmutis-Silvia,
IWC*



The Center for Coastal Studies whale disentanglement team rescues whales all along the east coast, including the Sanctuary.

*Photographer:
Regina Asmutis-Silvia,
IWC*

Concern A: Need for more information on Habits and Habitat use of SBNMS Whales and Other Marine Mammals

Possible Actions

- Continue to Support Regional Marine Mammal Data Set Development and Analysis
- Research and Report on Marine Mammal Food Web Relationships and Prey Life Histories
- Evaluate Extending Sanctuary Boundaries to Encompass Additional Marine Mammal Feeding Grounds

Concern B: Vessel Strikes on Whales and Other Marine Mammals

Possible Actions

- Assess Need for Speed Controls in the Sanctuary
- Design and Implement a Whalewatching Vessel Traffic Management Scheme

Concern C: Whale Harassment/Behavioral Disturbance

Possible Actions

- Design and Implement a Whalewatching Vessel Traffic Management Scheme

Concern D: Entanglement of Whales and Other Marine Mammals in Fishing Gear and Forms of Marine Debris

Possible Actions

- Develop Means to Determine Extent and Nature of Entanglements in the Sanctuary
- Coordinate With and Support Regional Efforts to Mitigate Impacts of Gear on Marine Mammals

Concern E: Impacts of Vessel Noise and Other Acoustics on Marine Mammals

Possible Actions

- Determine Effects of Noise on Marine Mammals in the Sanctuary
- Develop and Implement Vessel Noise Monitoring Plan

Concern F: Better Coordination with Other Regional Marine Mammal Protection Authorities

Possible Actions

- Participate in Regional Resource Management Organizations Involved in Marine Mammal Protection (e.g., Atlantic Right Whale Take Reduction Team)
- Coordinate With and Support Regional Efforts to Mitigate Impacts of Gear on Marine Mammals
- Establish Relationships with Other National and International Marine Protected Areas Having Marine Mammal Protection Issues

ISSUE 3: Condition of Water Quality

Public concerns over issues of water quality in the Sanctuary were numerous. Many of these concerns were due in large part to the opening of the 9.5-mile long sewage and wastewater discharge pipe operated by the Massachusetts Water Resources Authority. Commenters argued that a clearer understanding of the outfall's effects on the Sanctuary ecosystem is needed, particularly any impacts it could have on the endangered right whale or other marine mammal species in the Sanctuary.

A second concern related to the dumping of graywater and head waste in the Sanctuary. It was commented that the impact of individual and cumulative dumping events on Sanctuary resources could be harmful and significant in the case of endangered species, while the process of dumping was counter to the image of the Sanctuary.

Further concern was raised over the lack of information on the bioaccumulation of toxins and contaminants in various Sanctuary resources. Data on the levels of contaminants of living marine resources in the Sanctuary are limited at best, and almost no information exists to address the effects of pathogens (bacteria, viruses and parasites) on Sanctuary resources. The Sanctuary was urged to identify areas of potential or existing contaminant accumulation, evaluate potential pollutant contributions from various sources (e.g., outfall, disposal sites, atmospheric deposition), and determine the incidence level and impact of contaminants and pathogens on Sanctuary resources.

Concern also was expressed over the potential impact of off-shore mariculture operations on water quality in the Sanctuary. Currently, mariculture activities do not occur there, though the potential for off-shore work in the region has been discussed.

Finally, scoping participants argued that the Sanctuary needs to be better prepared for a hazardous materials (HazMat) spill and be better educated on response. It is incumbent upon the Sanctuary, they stated, to have a plan for cooperating with and supplementing the overarching HazMat plans of various other water quality authorities in the Massachusetts Bay area.

Concern A: No Existing Comprehensive Water Quality Plan

Possible Actions

- Design and Implement Annual Water Quality Monitoring Plan
- Revise Existing HazMat Plan

Concern B: Lack of Baseline Water Quality Data

Possible Actions

- Encourage Placement of Oceanographic Water Quality Monitoring Buoys
- Deploy High Frequency Wave and Current Monitoring Radar System

Concern C: Lack of Data on Resource Impacts of Various Toxins and Contaminants

Possible Actions

- Foster Partnerships with Regional Entities Researching Water Quality Conditions



A member of the NOAA Ship *Ferrel* deploys equipment to measure water conductivity, temperature and depth.

Photographer: SBNMS staff



The Sanctuary kiosk on MacMillan Wharf in Provincetown attracts the attention of whalewatch passengers and other tourists.

*Photographer:
SBNMS staff*

ISSUE 4: Lack of Public Awareness

Many concerns were directed to the Sanctuary's limited visibility in the general public. Commenters called for the Sanctuary to increase its name recognition and enhance basic understanding of the Sanctuary and its resources. Scoping participants also called for the Sanctuary to serve as a conduit of information to user groups including researchers, fishermen, scientists and recreational boat owners, and to conduct naturalist training and certification.

Concern A: Low Name Recognition

Possible Actions

- * Develop and Implement Outreach Plan for Various Media
- * Develop Outreach Program for Virtual Sanctuary Visitation (e.g., Website)
- * Develop Corporate/Celebrity Sponsorships and Other Partnerships

Concern B: Better Information Dissemination to the Public and User Groups

Possible Actions

- * Develop Outreach Program for Whale Watchers Including Certification
- * Develop Network of Sanctuary Information Centers
- * Establish Sanctuary as Regional Marine Education Resource Center
- * Develop Volunteer Program to Increase Effectiveness of Public Outreach

Concern C: Program Support

Possible Actions

- * Establish "Friends" Organization to Leverage Sanctuary Capabilities
- * Establish Graduate Intern Program to Facilitate Joint Education / Research with Area Universities

ISSUE 5: Effective Enforcement

Many concerns were expressed regarding enforcement in the Sanctuary. Several commenters noted that compliance with laws and regulations was unlikely without an enforcement presence and that enforcement was therefore critical to effective protection of Sanctuary resources. The general sentiment was expressed that existing laws need to be better enforced. Other comments were directed at enforcement of voluntary guidelines associated with whale watching (which can only be encouraged, not legally enforced) and the need to strengthen regulations. Commenters stated that current Sanctuary regulations alone are insufficient to protect Sanctuary resources.



Concern A: Need Greater Compliance with Regulations

Possible Actions

- Increase Enforcement Effort to Conduct Year-Round Sanctuary Patrols
- Develop Penalty Schedule for Sanctuary Regulations
- Revitalize Coast Guard Partnership to Help Enforce Sanctuary Regulations.
- Establish Volunteer Corps to Conduct On-the-Water Outreach

Concern B: New Types of Vessels / Activities Require Monitoring

Possible Actions

- Survey and Assess Uses and Activities in the Sanctuary Every Three Years
- Promulgate New Regulations as Needed to Avoid Injury to Sanctuary Resources
- Collaborate with NMFS to Assure Complementary Regulatory Scheme

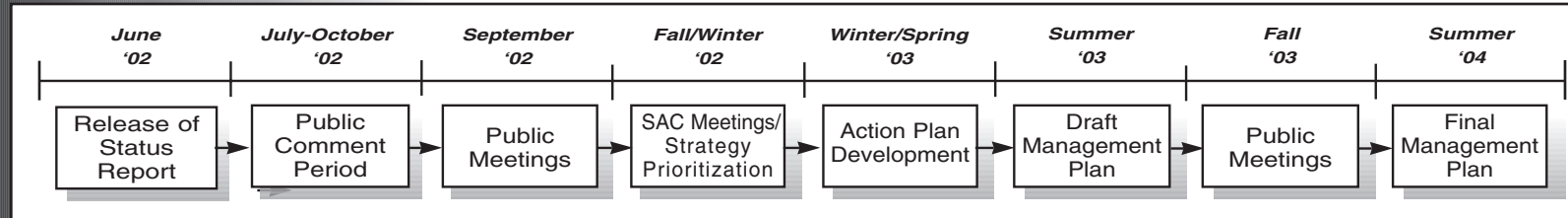
Concern C: Whalewatching Guidelines Need to Become Regulations to Avoid Injury to Marine Mammals

Possible Actions

- Consult in Promulgation of Whalewatching Regulations by NMFS

The Stellwagen Bank
National Marine
Sanctuary can become
quite crowded on a
sunny, summer day.

*Photographer:
Center for Coastal
Studies Staff*



Next Steps

The Sanctuary will re-open the public comment period and hold additional meetings as the means to gather broad public participation in identifying possible issues for further evaluation and analysis. The public comment period will be open during July 1-October 18, 2002. The meetings are scheduled for September 2002 and will be held at various dates, times and locations still to be decided. This meeting information will be posted on the Sanctuary website and publicly announced through various media when available. Please see the accompanying notice on how to get involved.

Upon completion of the comment period and next round of meetings, the site will review all input and work with the Sanctuary Advisory Council (SAC) to prioritize the various management actions proposed. With the assistance of Working Groups created by and reporting to the SAC, Sanctuary staff will develop draft action plans to address major issues. Workshops may be conducted in the course of Working Group deliberations to refine action plan content. The action plans ultimately will form the foundation of the revised management plan.

When the action plans are completed, they will be incorporated into the draft management plan. Release of the draft management plan is expected to occur during Summer 2003. In addition to the proposed action plans, it will contain relevant environmental information and background information on site operations. The draft management plan may also contain proposed regulatory changes.

The Sanctuary will release the draft management plan for public comment by holding another series of public meetings. Following these meetings, the Sanctuary and the National Marine Sanctuary Program will review the comments and make necessary changes before issuing the final management plan. The final management plan is expected to be completed during Summer 2004. The accompanying summary timeline identifies milestones in the management plan review process.

Get Involved:

The Sanctuary will provide notice of the public meetings through various media outlets, including local papers, listservers, our website, and, when appropriate, the Federal Register. If you would like to be added to our mailing list for updates and notices regarding the management plan review, as well as other Sanctuary activities, please write to:

Gerry E. Studds
Stellwagen Bank
National Marine
Sanctuary,
175 Edward Foster Rd.,
Scituate, MA 02066

Visit our web site at:
<http://stellwagen.nos.noaa.gov>

or send an e-mail to:
sbnmsplan@noaa.gov

You may also call the Sanctuary office at
781-545-8026
 and tell us you want to get involved.



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